U.S. Environmental Protection Agency Total Coliform Rule / Distribution System Advisory Committee Meeting

June 18-19, 2008

Location:
The Churchill Hotel
1914 Connecticut Ave., NW
Washington, DC 20009

Meeting Summary

Meeting Objectives/Desired Outcomes:

- Discuss options for revising the Total Coliform Rule, including rule construct, monitoring provisions, system categories, action levels, investigation and follow-up, and public notification, etc;
- Discuss and reach preliminary agreement on priorities and coordination mechanisms for research and information collection concerning distribution systems;
- Agree on a draft version of the agreement in principle (AIP) to circulate with member organizations for comments prior to the July meeting; and
- Discuss next steps in the context of the Committee's overall time table.

I. Welcome, Introduction, Meeting Objectives and Agenda

Crystal Rodgers-Jenkins, the Designated Federal Officer, opened the meeting and welcomed the members and meeting attendees to the ninth meeting of the Total Coliform Rule / Distribution System Advisory Committee (TCRDSAC).¹

Gail Bingham, the facilitator from RESOLVE, briefly reviewed the objectives of the meeting, the meeting agenda, and the meeting materials. She stated that the goal of the meeting was to reach a conditional agreement on a draft agreement in principle (AIP) that members of the Committee could circulate among their constituencies. Ms. Bingham referred the Committee to the current version of the AIP in the meeting binder that reflects both the Committee's discussions at the May plenary as well as discussion of the subgroups that met after the May meeting.²

¹ Please see Attachment A for the Total Coliform Rule / Distribution System Federal Advisory Committee roster. Please see attachment B for a copy of the meeting agenda. Please see Attachment C for a list of the meeting attendees.

² A copy of the draft AIP provided in the meeting materials is available from the Designated Federal Officer.

II. April Meeting Summary

The Advisory Committee reviewed suggested edits to and approved the April meeting summary provided in their binders.³

III. Status of Proposed Recommendations for a Revised Total Coliform Rule (RTCR)

On behalf of the Technical Work Group (TWG), Doug Owen and Vanessa Speight, both of Malcolm Pirnie, gave a presentation to the Committee on a "Comparison of Single-Text and Current TCR Options." The objectives of this presentation were to: qualitatively assess the extent to which the single-text option and current TCR meet the current TCR objectives, in combination with other rules; qualitatively compare the single-text option and current TCR against the Committee's criteria for rule revisions; and quantitatively compare just the costs of monitoring in the single-text option and current TCR.

During the discussion that followed the presentation, some members of the Committee pointed out that the analysis does not include the costs of the proposed criteria for reduced monitoring (cross-connection control program, certified operator, annual site visit). These members noted that some systems might choose to stay on baseline monitoring because it is less expensive than implementing the criteria. In response, one member reminded the Committee that in the current proposal, systems have a choice among criteria. Another member suggested there may be other, less expensive, criteria for the Committee to consider that are also protective of public health. One member also noted that there are costs to states for tracking compliance with reduced monitoring criteria, although it was not possible for the TWG to quantify these costs in its analysis.

IV. Development of a Draft Agreement in Principle

Throughout the course of the two-day meeting, the members of the Advisory Committee discussed proposed changes and additions to the language in several sections of the draft agreement in principle (AIP) for the revised Total Coliform Rule (RTCR). In some instances, the Committee reached preliminary agreement on language to be included for further consideration in the next version of the AIP (highlighted in bold in the following sections of the summary). In other instances, groups of members agreed to write new language following the meeting, based on concepts discussed by the Committee. All of these changes are reflected in a new version of the AIP attached to the end of this summary.⁴ (The references to section numbers in this portion of the summary refer to the section numbers in the new version of the AIP.)

The Committee agreed to include language in each section of the AIP that explains the rationale and principles supporting the Committee's recommendations. The facilitators worked with

³ Please see Attachment D for a copy of the April TCRDSAC meeting summary.

⁴ A copy of the new version of the AIP reflecting all the changes discussed at the June plenary is available from the Designated Federal Officer.

several volunteers following the meeting to draft rationale language, based on the Committee's discussions, for inclusion in the new version of the AIP.

A. Rule Construct [Section 3.1 of attached AIP]

Members of the Committee discussed proposed changes and additions to the language in Section 3.1, Rule Construct, as well as how to logically structure the section. In addition to including language about the Committee's rationale, members suggested adding language about the assessment and corrective action provisions of the rule.

Members noted that sanitary defects are defined differently in two separate sections of the current AIP. Members agreed that the definition should in be in section 3.1 and to continue discussing how best to define sanitary defects. One member stressed that the definition should reference the distribution system and be as specific as possible.

B. Analytical Methods [Section 3.2]

The Committee discussed proposed changes and additions to the language in Section 3.2, Analytical Methods, of the AIP. During the discussion, members highlighted the following concepts for inclusion in the AIP:

- Include language that encourages concurrent analytical results for E. coli and TC.
- Ask an expert panel to review the current performance criteria for analytical tests and establish new criteria if needed.
- Have an expert panel review the process for re-examining reference methods. The expert panel will not necessarily be linked to the TCR.
- Include consideration of temperature and holding time for samples.

Based on the discussion, members agreed to consider the following language in the next version of the AIP:

The TCRDSAC recommends that the best available analytical methods be used to detect the microbial indicators. USEPA should consider approving methods that allow the most rapid analytical results for E. coli and TC and that provide relatively concurrent analyses, without significantly sacrificing accuracy, precision and specificity.

When the Total Coliform Rule (TCR) was published in the Federal Register in 1989, only four analytical methods were listed as approved methods for use in compliance sample analysis (54 FR 27565, June 29, 1989). In the 19 years since this rule was promulgated, an additional eight methods have been approved for use by the Agency. The current 12 approved analytical methods are of different technology types and have different specificity and sensitivity. There have been several reports of differences in the specificity of these methods and of differences in the abilities of the methods to detect coliforms. The Advisory Committee recommends that the Agency evaluate all currently approved coliform analytical methods to determine whether these methods continue to be appropriate for use for drinking water compliance monitoring.

In addition, the Advisory Committee recommends that EPA conduct an external panel review of the Alternative Test Procedure (ATP) microbial protocol for TC/EC methods for drinking water to determine if the criteria for acceptance of the new methods are

consistent with the intent and objectives of the TCR, considering such issues as sensitivity, specificity, matrix interference, false positive and false negative results, temperature, and holding time, particularly with respect to the occurrence of TC and EC in drinking water supplies.

Members will continue to discuss proposed language for determining and recommending performance criteria that should be considered when accepting new methods.

C. Transition to New Rule [Section 3.3]

The Committee discussed several concepts related to the provisions for transition from the current rule to the RTCR.

Several members of the Committee supported the concept that systems currently on reduced monitoring and NCWS on quarterly monitoring should stay on their current monitoring schedule unless an event, such as an acute MCL violation or a sanitary survey with uncorrected sanitary defects, occurs that would support an increase to monthly monitoring. To support this view, some members noted that states had already gone through a process to approve those systems on reduced monitoring. Others emphasized that keeping systems on their current monitoring schemes will give states the time they need to transition to the RTCR.

One member expressed concern about allowing NCWS currently on quarterly monitoring to stay on quarterly during the transition period given that the draft AIP proposes a baseline of monthly monitoring for these systems with new criteria for reduced quarterly monitoring. This member noted a similar concern about the length of time systems currently on annual monitoring would continue on annual monitoring without a review of whether they meet the criteria for annual monitoring under the RTCR. Another member suggested that in order to remain on annual monitoring, these systems should be required to have annual site visits, while others suggested setting a time limit for the transition period after which systems that are allowed to stay on reduced monitoring during the transition period should be required to meet the criteria for reduced monitoring under the RTCR.

The state and EPA representatives to the Committee offered the following option for the Committee's consideration:

All systems will continue with their current monitoring schedules until one of the following events either supports a reduction or increase in the monitoring schedule if reduced monitoring is allowed by the primacy agency.

- During the next regularly scheduled sanitary survey after the rule's compliance effective date, the system either does or does not qualify for reduced monitoring based on the criteria under [refer to section(s) on reduced monitoring criteria]. The determination on reduced monitoring will be completed no longer than 3 years for community and 5 years for non-community after the rule's effective date.
- The system is triggered back to base monitoring under [refer to section(s) on increased monitoring requirements].

Some members suggested that NCWS on quarterly monitoring should be required to have a site visit in the first year of RTCR implementation. One member noted in response that the Ground

Water Rule (GWR) implementation starts in December 2009, and by the time the RTCR goes into effect in approximately 2015, every system will have had a sanitary survey.

Members of the Committee suggested adding language in this section indicating that compliance with the GWR should be one of the factors considered in determining baseline monitoring requirements for NCWS.

One member of the Committee suggested that the criteria for staying on reduced monitoring during the transition period and the criteria for qualifying for reduced monitoring once the transition period is over should be consistent.

<u>D. Monitoring Frequencies (Baseline, Reduced and Criteria for Reduced Monitoring [Section 3.4]</u>

The Committee discussed monitoring provisions for the different public water system categories.

Non-Community Ground Water Public Water Systems Serving 1,000 Persons or Less [3.4.a] Members of the Committee discussed whether the baseline monitoring for ground water non-community water systems (NCWS) serving a population of 1,000 or less should be monthly or quarterly. Members who preferred a baseline of monthly monitoring offered the following arguments to support their view:

- The RTCR should signal a fresh approach with all systems starting out on monthly
- A baseline of monthly monitoring is more consistent with the Committee's intent to provide systems with incentives to take proactive actions to protect public health in order to qualify for reduced monitoring
- Monthly monitoring provides an important diagnostic tool to identify systems that would benefit from a self assessment in the absence of these proactive actions

Other members who preferred a baseline of quarterly monitoring, made the following points to support their view:

- To ease the process of implementation and reduce the costs, it is better to keep the current baseline of quarterly
- Quarterly monitoring leaves room for increasing monitoring frequency when there are problems
- Requiring a baseline of quarterly addresses the concern about those states that do not allow reduced monitoring

One member proposed that if the baseline monitoring is quarterly there also should be a provision for additional monitoring the month following a single TC positive. To support the proposal, this member noted that TC contamination is transient, and a TC positive could indicate a problem even if the repeat samples are negative.

One member noted that some states have laws prohibiting state agencies from enacting regulations that are more stringent than EPA regulations. This member expressed concern that some of the 27 states that require monthly monitoring for NCWS serving less than 1,000 might be precluded from doing so if the baseline monitoring in the RTCR is quarterly. Another

member suggested including language in the RTCR that allows those states to continue requiring monthly monitoring if they wish. A member of the TWG noted that in a 2002 survey of states, 19 of the 27 states that require monthly monitoring responded, and 16 of these are allowed to enact laws more stringent than EPA regulations.

A group of Committee members offered the following proposal for baseline, reduced and increased monitoring for the Committee's consideration:

- Baseline monitoring: quarterly
- Reduced monitoring: annual, if the following criteria are met:
 - o Sanitary survey free of sanitary defects, and
 - o Clean compliance history for two years, and
 - o Annual site visit or annual voluntary Level Two assessment, and one of the following:
 - Approved Cross-Connection Control program, or
 - Certified Operator, or
 - 4-log disinfection
- Increased monitoring: monthly, if one of the following occurs:
 - o Acute MCL
 - o Level 2 trigger
 - o Significant non-compliance with monitoring requirements
 - o Treatment Technique violation
- Return to baseline (quarterly) monitoring: systems must meet the following criteria:
 - o Sanitary survey free of sanitary defects, and
 - o Clean compliance history for 12 months, and one of the following:
 - Annual site visit or annual voluntary Level Two assessment, or
 - Cross-Connection Control program, or
 - Certified Operator, or
 - 4-log disinfection
- Return to reduced (annual) monitoring: systems must meet the following criteria:
 - o Sanitary survey free of sanitary defects, and
 - o Clean compliance history for 12 months, and
 - Annual site visit or annual voluntary Level Two assessment, and one of the following:
 - Approved Cross-Connection Control program, or
 - Certified Operator, or
 - 4-log disinfection
- Systems on quarterly or annual monitoring with a Level One trigger or one TC positive must take two additional samples the following month

The Committee discussed several aspects of this proposal including the following:

<u>Additional Routine Monitoring</u>. One member suggested changing the additional routine monitoring requirement after a TC positive or Level One trigger to two additional samples for the three following months. Another member suggested two months of additional samples after one TC positive and three months after a Level One trigger.

Approved Cross-Connection Control Program. The Committee discussed what is meant by an "approved" Cross-Connection Control program. A member referred to the paragraph in the proposed State Primacy Provisions [Section 3.15] on "Reduced Monitoring Criteria," which states that the primacy agency will describe how the criteria (including cross-connection control programs) will be evaluated in order to determine when systems qualify. States that do not have a Cross-Connection Control program would have to develop standards for evaluating cross-connections. One member expressed concern that only states that choose to allow reduced monitoring will have access to these standards. In response, another member noted that the Committee could recommend that EPA and the states develop guidance for cross-connection control programs.

<u>Certified Operator.</u> One member noted that there is no national program for training or operator certification, and suggested that the Committee recommend that EPA implement such a program. Another member suggested building on existing programs, such as the Drinking Water Academy.

<u>4-Log Disinfection</u>. One member suggested changing the criterion of 4-log disinfection to maintenance of disinfection residual in the distribution system or an alternate technology. Another member suggested using the following language, similar to that in the GWR and the Surface Water Treatment Rule:

- Disinfection residual entering the distribution system must be no less than 0.2 mg/l for more than four hours one day based on no less than daily measurements for systems serving <500 people and 2 samples per day for systems serving 500-1,000 people; if at any time the residual falls below 0.2 mg/l the system must continue to take a grab sample every 4 hours until the residual is equal to or greater than 0.2 mg/l;
- Cannot have an undetectable residual in two consecutive months at the same location that TCR is monitored.

or

- The system must maintain at least a 4-log inactivation of viruses each day of the month based on daily monitoring (with allowance for one daily exception)

Another member suggested adding: "Other equivalent enhancements to water system barriers as approved by the primacy agency." A member expressed support for this concept if there were documentation of the process for approving these alternatives. In response, another member suggested that the process of approval be included in the primacy agreement.

<u>Clean Compliance History</u>. The Committee discussed the timeframes for the clean compliance history requirement for qualifying for reduced monitoring and for returning to reduced monitoring criteria (after an event that caused an increase to monthly monitoring). Some members thought the timeframe should be two years to qualify for reduced monitoring and one year to return to reduced monitoring, arguing that the bar should be higher for those systems applying for the first time to qualify for reduced monitoring. Others thought both requirements should be a 12-month clean compliance history, because it would be easier for states to track.

During the meeting a group of members, representing both points of view, met and proposed the following for the Committee's consideration:

- Reduced monitoring requirement for clean compliance history:
 - The system must have a clean (TCR) compliance history (no MCL violations, level 1 or 2 triggers, treatment technique violations or monitoring violations) for a minimum of 12 months
- Return to reduced monitoring requirements:
 - Within the last 12 months, the system shall have a completed sanitary survey or a site visit or a voluntary level 2 assessment by a party approved by the Primacy Agency and the system must be free of sanitary defects (or has an approved plan and schedule to correct them), including a protected water source and meeting approved construction standards, and
 - o The system must have a clean (TCR) compliance history (no MCL violations, level 1 or 2 triggers, treatment technique violations or monitoring violations) for a minimum of 12 months, (and one of the three optional criteria)

During the discussion of NCWS, a member of the Committee asked for an analysis of what the costs would be if a NCWS triggered a Level One assessment (resulting in a self-assessment and additional routine samples), and then triggers a Level Two assessment (resulting in a Level Two assessment, additional routine samples, and 12 months of monthly sampling). In response, the TWG provided a handout to the Committee with these numbers. ⁵

Community Ground Water Systems Serving 1,000 Persons or Less [3.4.c] The Advisory Committee then discussed monitoring provisions for ground water community water systems serving a population of 1000 or less. Members supported including language in the AIP based on the same concepts discussed above for NCWS, including:

- Reduced monitoring requirements:
 - o Sanitary survey free of sanitary defects, and
 - o Clean compliance history for 12 months, and
 - o One of the following:
 - Annual site visit or annual voluntary Level Two assessment,
 - Approved Cross-Connection Control program, or
 - 4-log disinfection, or
 - Continuous monitoring of disinfection residual, or
 - Equivalent enhancements to water system barriers (see specific language above)
- Increased monitoring requirements
 - o Acute MCL, or
 - o Level 2 trigger, or
 - o Significant non-compliance with monitoring requirements, or
 - o Treatment Technique violation
- Requirements for returning to quarterly monitoring

⁵ A copy of this handout is available from the Designated Federal Official.

- o Sanitary survey or a site visit or a voluntary level 2 assessment within the last 12 months, and
- o Clean compliance history for 12 months, and
- o One of the following:
 - Approved Cross-Connection Control program, or
 - 4-log disinfection, or
 - Continuous disinfection monitoring of disinfection residual, or
 - Equivalent enhancements to water system barriers

Public Water Systems Serving 1,001 or More Persons [3.4.e]

A member of the Committee presented for the Committee's consideration a proposal to reduce the number of samples per month for large ground water community water systems if the systems meet a list of eight criteria. ⁶ The rationale for the proposal is to provide an incentive for large ground water systems to disinfect and take other actions protective of public health. Although supporting the intent of the proposal, some members noted that systems would probably not take the option because the cost of initiating disinfection would be much greater than the savings resulting from taking fewer samples. Other members expressed concern about allowing such a large number of systems that already take these actions to reduce the number of samples they take. One member suggested limiting the size of systems eligible for this option, and adding a criteria that sampling plans include the most vulnerable sites in the system.

The Committee agreed to ask a subgroup of the Committee to continue discussing this option.

Seasonal Systems [3.4.f]

The Advisory Committee discussed the rationale and specific provisions for the monitoring requirements for seasonal systems and determined that the next version of the AIP will include the following language:

Non-community water systems which operate less than 12 months per year shall collect samples monthly unless:

- the system meets the reduced monitoring criteria under 3.4.a.3; and
- the system can demonstrate completion of a primacy agency approved start up procedure; and
- the system has an approved sample site plan which designates the time period of highest vulnerability to contamination. The system must collect a compliance sample during this time period.

E. Assessment [Section 3.8]

The Advisory Committee discussed proposed language for what triggers a Level One or Level Two assessment and the timeframe for completing each assessment.

Level 1 Trigger. One member of the Committee suggested that failure to take repeat samples after one TC positive should be a Level One trigger rather than a monitoring and reporting violation. This member reasoned that the repeat samples, if positive, would have triggered a Level One assessment, so failure to take the repeats should have the same consequence. Others

⁶ A copy of this proposal is available from the Designated Federal Official.

agreed, and the Committee decided to consider this as part of a more general review of monitoring and reporting violations in the context of the new RTCR paradigm.

Level 2 Trigger. One member expressed the view that the Level Two trigger should be two Level One exceedances in two consecutive months rather than two exceedances in a rolling 12-month period. Another member noted that the definition should reflect the concept of a "reset" discussed at the last meeting. Another member supported retaining the rolling 12-month option because multiple, non-consecutive exceedances can indicate vulnerability. Others asked about how a Level Two trigger would be defined for systems on annual monitoring, and the Committee determined that the new version of the AIP will include the following for further consideration:

For systems with approved reduced annual monitoring, Level One Trigger in two consecutive years will trigger a Level Two assessment

Members also suggested the following changes to the language on Level Two assessments in the draft AIP:

- In number 3 under the section on Level Two triggers, change the language to "the primacy agency has determined the likely cause of the...TC positive"
- Add language to reflect that assessments will be conducted by or under the direction of certified operators or the equivalent

Level One Timetable. One member explained that states generally send the systems notice of exceedances on the 10th of the month following the monitoring period. This member suggested that from the point of notification, systems should have from 10 to 30 days to complete the assessment and send it to the state. Another member questioned why systems would need more than ten days to complete the simple checklist envisioned by the Committee. In response, another member explained that small systems without full-time staff may not see the notification for several days after it is sent. One member suggested including a 20-day timeframe in the AIP as a placeholder, with the understanding that EPA could ask specifically for public comment on this proposal. During this discussion, members noted that the schedule for assessments could be shortened if laboratories were required to report results to the state immediately or within a short timeframe. In response, one member suggested that the Committee recommend that EPA look further into this issue.

Level Two Timetable. During the discussion of the schedule for completion of a Level Two assessment, members noted that within the proposed 40-day timeframe, there is also a requirement for 24-hour public notification for two of the three proposed Level Two triggers. One member suggested that implementation of the assessment provisions would be easier if Level One and Level Two assessments were on the same schedule – 30 days – rather than 20 days for Level One and 40 days for Level Two.

F. Violations and Public Notification Requirements [Section 3.11]

The Advisory Committee discussed proposed changes and additions to the language in Section 3.11, Violations and Public Notification, as well as how to logically structure the section. Members began by discussing the definitions and consequences of acute MCL violations, acute monitoring violations, treatment technique violations, routine and repeat monitoring violations, and reporting violations. To help with the discussion, the Committee reviewed a chart, prepared

by a group of members, summarizing monitoring and reporting violations under the current rule.⁷ One member suggested that a similar chart, listing all violations and consequences, be included in this section of the AIP.

One member of the Committee suggested that both a major repeat monitoring violation (failure to take all repeat samples) and a minor repeat monitoring violation (failure to take some, but not all, repeat samples) should trigger a Level One assessment, rather than a monitoring violation. Another member suggested that failure to take either all or some repeat sample after an *E. coli* positive should be an acute monitoring violation and trigger a Level Two assessment.

During the discussion, a member of Committee asked about the regulatory impact of the violations and consequences under discussion. In response, a member of the TWG provided the following information:

The number of systems with monitoring and reporting violations, based on 2005 data:

o Major routine violations: 16,000 (5000 with more than one)

Minor routine violations: 1,700
 Major repeat violations: 1,252
 Minor repeat violations: 514

The estimated number of systems that would trigger a Level One assessment:

NCWS: 9200
 Small CWS: 1500
 Large CWS 500

The Committee member observed that under the approach suggested above, 1,700 systems would trigger a Level One assessment as a result of repeat monitoring violations, in addition to the 11,200 systems that would trigger a Level One assessment as a result of TC exceedances. A member of the TWG noted, however, that the TWG made the assumption in its analysis of monitoring and reporting violations that 50 percent of these violations were reporting violations.

One member of the Committee asked that Monitoring Subgroup consider proactive ways to change the behavior of the 16,000 systems with major routine monitoring violations.

One member suggested moving the following sentence to the section on Reporting to Primacy Agency and Recordkeeping [Section 3.14]:

PWS are required to notify the State after learning of an *E. coli*-positive sample consistent with the provisions in the TCR.

A member of the Committee suggested that EPA engage in more public discussion of the language for Public Notification to ensure that it aligns with the treatment technique construct, and that it allows utilities to describe its response to the event leading to Public Notification.

⁷ A copy of the chart is available from the Designated Federal Official.

G. Other [Section 3.16]

A member of the Advisory Committee suggested including in the AIP a recommendation to develop a partnership program for distribution system optimization, similar to the Partnership for Safe Water, as a way of promoting best management practices to protect drinking water quality. The member proposed the following language:

The FAC recommends that a voluntary program develops a distribution system optimization component focused on protecting the integrity of drinking water quality once it is delivered to the distribution system. The program components should be reflective of a continuous improvement program that encompasses water distribution optimization principles and practices for system design, operations, and maintenance. The program should define excellence in distribution system operation in terms of processes, systems, procedures, and metric measures (e.g. leakage into distribution system, pressure, disinfectant residual) and target program participation to all drinking water utilities regardless of system size.

One member stressed that the program should be voluntary and that its purpose should be to encourage best management practices, not to lay the groundwork for future rulemaking.

H. Miscellaneous

A group of members of the Committee met to discuss the continued involvement of stakeholders after the AIP is signed and EPA is writing the proposed rule. The group offered the following language for the new version of the AIP for the Committee's consideration:

It is important that the agency be able to move forward as rapidly as its administrative processes will allow. The TCRDSAC recognizes that regardless of EPA's best efforts, this process will be lengthy and involved. There will be sources of input that are not familiar with the TCRDSAC recommendations and underlying rationales. The TCRDSAC believes that continual dialogue with stakeholders, particularly the TCRDSAC and the organizations they represent is important to assuring that at proposal the TCRDSAC member organizations understand the underlying analyses and rule framework reflected in the proposed rule and preamble. The TCRDSAC believes that such understanding will allow them to be better representatives for the proposed rule when it is published, and better able to inform EPA's effort to propose a rule that "has the same substance and effect as the elements of the Agreement in Principle." The TCRDSAC recommends that EPA meet with stakeholders to discuss specific issues that arise in constructing the revised rule and preamble. This dialogue can also address a number of aspects of the rule revision that the TCRDSAC has not had the time to address and additional stakeholder involvement would be beneficial. Example topics include: public notification language, rule guidance, integration of the rule changes with other rules, etc.

Members stressed the importance of ensuring that the ongoing dialogue about the proposed rule is both inclusive and transparent.

One member suggested stating in one place, early in the AIP, that provisions in the current rule not explicitly revised in the RTCR will remain unchanged.

V. Public Comment

A. Dawn Kristof Champney, Water and Wastewater Equipment Manufacturers Association (WWEMA)

Dawn Kristof Champney, president of the Water and Wastewater Equipment Manufacturers Association, gave public comment at the meeting. She encouraged Committee members to frame the RTCR in a way that would leave room for the use of new technologies. She described a testing method currently under development that would test samples in the field, provide results within 24 hours, and transmit them instantly to regulators.

B. Paul Whittemore, Aquarion Water on behalf of Auburn Montessori School

Paul Whittemore of Aquarion Water read a letter to the TCRDSAC his organization received from Connie Mercier, the director of Auburn Montessori School, which is also a small public water system. In her letter, Ms. Mercier noted concern about the financial burden of increased sampling requirements in a revised TCR. She added that she may have to decrease enrollment and staffing, so that her school no longer qualifies as a public water system.

VII. Next Steps

Ms. Bingham noted that Committee subgroups will meet as needed to build on the Committee's discussion and develop proposed language for the Agreement in Principle for discussion on the July conference call and at the July plenary meeting.

The facilitators will revise the AIP and distribute the new version to TCRDSAC members following the meeting.

Members will send comments on the Level One and Level Two assessment checklists by June 27, 2008.

The Advisory Committee will meet via conference call on July 18, 2008 at 1 PM EDT. The Committee will meet in person on July 30-31, 2008 in Washington, D.C.

NOTE: This document was prepared by the facilitators for consideration by the Total Coliform Rule Distribution System Advisory Committee and does not constitute a product of the Committee. The Total Coliform Rule Distribution System Advisory Committee is a federal advisory committee chartered by Congress, operating under the Federal Advisory Committee Act (FACA; 5 U.S.C., App.2). The Committee provides advice to the Administrator of the U.S. Environmental Protection Agency on revisions to the Total Coliform Rule (TCR), and on what information about distribution systems is needed to better understand the public health impact from the degradation of drinking water quality in distribution systems. The findings and recommendations of the Committee do not represent the views of the Agency, and this document does not represent information approved or disseminated by EPA.

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⁸ A copy of the letter is available from the Designated Federal Officer.

Attachments

 $Attachment \ A-TCRDSAC \ roster*$

Attachment B – Meeting agenda*

Attachment C – List of meeting attendees

Attachment D – April TCRDSAC meeting summary*

Attachment E – Doug Owen and Vanessa Speight's presentation "Comparison of Single-Text and Current TCR Options"*

^{*} The meeting presentation and other documents may be found online at http://www.epa.gov/OGWDW/disinfection/tcr/regulation_revisions_tcrdsac.html.

U.S. Environmental Protection Agency Total Coliform Rule / Distribution System Advisory Committee Meeting June 18-19, 2008

Meeting Attendees

Karl Anderson, U.S. EPA

Ali Arvanaghi, U.S. EPA

David Baird, National Rural Water Association*

Pamela Barr, U.S. EPA*

Jeremy Bauer, U.S. EPA

Gail Bingham, RESOLVE

Eric Bissonette, U.S. EPA

Manja Blazer, IDEXX

Erica Brown, Association of Metropolitan Water Agencies*

Joan Brunkard, Centers for Disease Control and Prevention

Gary Burlingame, Philadelphia Water Department

Joyce Chandler, U.S. EPA

Sean Conley, U.S. EPA

Cynthia Dougherty, U.S. EPA*

Patti Fauver, Environmental Council of States*

Kathy Grant, RESOLVE

Tom Grubbs, U.S. EPA

Yu-Ting Guilaran, U.S. EPA

Trish Hall, U.S. EPA

Christine Maloni Hoover, National Association of State Utility Consumer Advocates*

Dawn Kristof Champney, WWEMA

Mark LeChevallier, National Association of Water Companies*

Debbie Lee, RESOLVE

Frank Letkiewicz, The Cadmus Group, Inc.

Carrie Lewis, American Water Works Association*

Gary Lynch, National Association of Water Companies*

Jennifer Lynette, U.S. EPA

Harvey Minnigh, Rural Community Assistance Partnership*

John Neuberger, Council of State and Territorial Epidemiologists*

Darrell Osterhoudt, Association of State Drinking Water Administrators*

Doug Owen, Malcolm Pirnie

Angela Page, U.S. EPA

Jim Purzycki, American Backflow Prevention Association

Graciela Ramirez-Toro, CECIA-IAUPR

Stig Regli, U.S. EPA

J. Kevin Reilly, U.S. EPA

Alan Roberson, American Water Works Association*

Crystal Rodgers-Jenkins, U.S. EPA

Ken Rosenfeld, National League of Cities*

Kenneth Rotert, U.S. EPA

Sharon Roy, Centers for Disease Control and Prevention

Rick Sakaji, East Bay Municipal Utility District

Tom Schaeffer, Association of Metropolitan Water Agencies

John Scheltens, AWWA

Paul Schwartz, University of Southern California

Nicole Shao, U.S. EPA

Jerry Smith, Association of State Drinking Water Administrators*

Vanessa Speight, Malcolm Pirnie

David Spenard, National Association of State Utility Consumer Advocates*

Scott Summers, University of Colorado at Boulder

Lynn Thorp, Clean Water Action*

Lesley Vazquez-Coriano, U.S. EPA

Steve Via, American Water Works Association

Bob Vincent, National Environmental Health Association*

David Visintainer, Association of Metropolitan Water Agencies*

Paul Whittemore, National Rural Water Association*

Beate Wright, Loudoun Water

Mae Wu, Natural Resources Defense Council*

Yvonne Yuen, U.S. EPA